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Re the Application of: **Kenichi NOMA et al.**

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For: **FOLDABLE PORTABLE TERMINAL**

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Customer Number: **38834**

**SUBMISSION OF VERIFIED TRANSLATIONS**  
**OF CERTIFIED COPY OF FOREIGN PRIORITY DOCUMENTS**

Commissioner for Patents  
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August 14, 2007

Sir:

Submitted herewith are verified translations of the certified copies of the foreign priority documents for Japanese Application No. 2003-377146 filed on November 6, 2003; Japanese Application No. 2003-379230 filed on November 10, 2003; and Japanese Application No. 2004-022113 filed on January 29, 2004. The translations are being submitted to overcome the 35 U.S.C. §103 rejection in the Office Action of April 23, 2007.

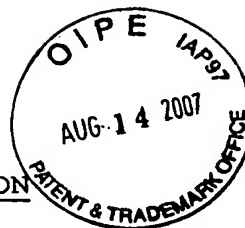
In the event any fees are due in connection with this paper, please charge our Deposit Account No. 50-2866.

Respectfully submitted,

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VERIFICATION OF TRANSLATION

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CHUO-KU, OSAKA-SHI, OSAKA, JAPAN declares:

(1) that he knows well both the Japanese and English  
languages;

(2) that he translated the specification, the claims and  
the abstract of the Japanese Patent Application Number 2003-  
397970 from Japanese to English;

(3) that the attached English translation is a true and  
correct translation of the specification, the claims and the  
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2003-379230, and 2004-022113 to the best of his knowledge and  
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application or any patent issued thereon.

This day of July 30, 2007

Nobuyasu NISHIOKA



[TITLE OF THE DOCUMENT] CLAIMS

[CLAIM 1]

A foldable portable terminal comprising a body cabinet  
(1) and a cover cabinet (2) openably/closably coupled to each  
5 other; a first speaker (27) disposed in the cover cabinet  
(2); one or more sound emitting holes (29) for passing a  
sound wave emitted from the first speaker (27), provided on  
an inner surface of the cover cabinet (2) in a position  
opposed to a sound emitting surface of the first speaker  
10 (27); one or more openings (19) provided on an inner surface  
of the body cabinet (1) in a position to be opposed to the  
sound emitting holes (29) with the both cabinets (1, 2)  
closed; and a microphone (13) having a sound collecting  
surface facing the openings (19), disposed in the body  
15 cabinet (1), the foldable portable terminal being  
characterized in that:

the cover cabinet (2) comprises a second speaker (210)  
for emitting a sound wave toward a rear surface of the cover  
cabinet (2), and any one or both of the cabinets comprise  
20 closing means for closing the sound emitting holes (29) in a  
closed state of the both cabinets (1, 2).

[CLAIM 2]

The foldable portable terminal according to claim 1,  
wherein the closing means comprises detection means for

detecting an open state and a closed state of the both  
cabinets (1, 2) and a shutter mechanism (4) for  
opening/closing the sound emitting holes (29) in accordance  
with the detection, the shutter mechanism (4) comprising a  
5 shutter member (40) supported so as to be capable of entering  
between opposed faces of the sound emitting surface of the  
first speaker (27) and the sound emitting holes (29), and a  
drive mechanism (42) for reciprocatingly driving the shutter  
member (40) in accordance with the detection, the shutter  
10 member (40), with operation of the drive mechanism (42),  
entering between the opposed faces to close the sound  
emitting holes (29) in the closed state of the both cabinets  
(1, 2), and escaping from between the opposed faces to open  
the sound emitting holes (29) in the open state of the both  
15 cabinets (1, 2).

[CLAIM 3]

The foldable portable terminal according to claim 1,  
wherein the openings (19) and the sound emitting holes (29)  
are provided in positions to be slightly staggered in a  
20 closed state of the both cabinets (1, 2), and the closing  
means comprises a projection (43) formed within an inner  
surface area of the body cabinet (1) in a position to face  
the sound emitting holes (29) in a closed state of the both  
cabinets (1, 2), the projection (43) closing the sound

emitting holes (29) in the closed state of the both cabinets (1, 2), and separating from the sound emitting holes (29) with the cover cabinet (2) opened.

[CLAIM 4]

5           The foldable portable terminal according to claim 3, wherein the projection (43) is formed from an elastic resin.

[TITLE OF THE DOCUMENT] SPECIFICATION

[TITLE OF THE INVENTION] FOLDABLE PORTABLE TERMINAL

[TECHNICAL FIELD]

[0001]

5           The present invention relates to a foldable portable terminal, such as a foldable portable telephone, including a pair of flat cabinets openably/closably coupled to each other.

[BACKGROUND ART]

10           [0002]

          In recent years, foldable portable telephones have been making progress in multi-functionalization along with being made smaller and thinner. Development is in progress of foldable portable telephones that allow communication and  
15 message transmission and reception even with the both cabinets closed (see, for example, Patent Documents 1-3).

[0003]

          A foldable portable telephone shown in for example FIG. 7 and FIG. 8 has been proposed as a foldable portable  
20 telephone that allows communication even with the both cabinets closed.

          The foldable portable telephone includes a body cabinet 8 and a cover cabinet 9 openably/closably coupled through a hinge mechanism 83. A plurality of manual keys 81 and a

transmitter 82 are disposed on an inner surface of the body cabinet 8, while a microphone 84 having a sound collecting surface facing the transmitter 82 is disposed inside the body cabinet 8. The cover cabinet 9 has an inner surface provided with a main display 91 and a first receiver 92 disposed in a position to be opposed to the transmitter 82 with the both cabinets 8, 9 closed. A second receiver 93 is disposed on a rear surface of the cover cabinet 9. The cover cabinet 9 has an interior provided with a first speaker 94 having a sound collecting surface facing the first receiver 92 and a second speaker 95 having a sound collecting surface facing the second receiver 93.

A first projection 85 projects near the transmitter 82 of the body cabinet 8, while a second projection 96 projects near the first receiver 92 of the cover cabinet 9, the both projections 85, 96 being in contact with each other with the both cabinets 8, 9 closed.

[0004]

With the foldable portable telephone, when the both cabinets 8, 9 are closed as shown in FIG. 8, a cabinet open/close detector (not shown) detects that the both cabinets 8, 9 are closed to feed a detection signal based on the detection to a control circuit (not shown). The control circuit causes the microphone 84 and the second speaker 95 to

function in response to the detection signal. Accordingly, speech transmission and reception become possible with the both cabinets 8, 9 closed. It is therefore unnecessary to open the both cabinets 8, 9 when a call is received.

5                   [Patent Document 1] JP 2003-18257, A [H04M1/02]  
                  [Patent Document 2] JP 2003-51871, A [H04M1/02]  
                  [Patent Document 3] JP 2003-134201, A [H04M1/02]

[DISCLOSURE OF THE INVENTION]

[PROBLEM TO BE SOLVED BY THE INVENTION]

10                   [0005]

                  However, with the foldable portable telephone, when speech transmission and reception are performed with the both cabinets 8, 9 closed as shown in FIG. 8, vibration of the second speaker 95 can be transmitted to the first speaker 94  
15 through the cover cabinet 9 and air inside the cover cabinet 9 to thereby vibrate the first speaker 94. This can cause the first speaker 94 to emit a sound wave having a waveform approximated to that of a sound wave emitted from the second speaker 95. The sound wave emitted from the first speaker 94  
20 can be transmitted to the microphone 84 because the first speaker 94 is opposed to the microphone 84 through the first receiver 92 and the transmitter 82. Consequently, there has been a problem in that howling through the first speaker 94 is generated between the second speaker 95 and the microphone



84.

[0006]

Accordingly, an object of the present invention is to provide a foldable portable terminal including a pair of coupled cabinets, wherein a sound wave emitted from a speaker disposed in one cabinet is not transmitted to a microphone disposed in the other cabinet when the both cabinets are closed.

[MEANS FOR SOLVING THE PROBLEM]

10 [0007]

A foldable portable terminal of the present invention comprises a body cabinet 1 and a cover cabinet 2 openably/closably coupled to each other. A first speaker 27 is disposed in the cover cabinet 2. One or more sound emitting holes 29 for passing a sound wave emitted from the first speaker 27 are provided on an inner surface of the cover cabinet 2 in a position opposed to a sound emitting surface of the first speaker 27. One or more openings 19 are provided on an inner surface of the body cabinet 1 in a position to be opposed to the sound emitting holes 29 with the both cabinets 1, 2 closed. A microphone 13 having a sound collecting surface facing the openings 19 is disposed in the body cabinet 1.

A second speaker 210 for emitting a sound wave toward a

rear surface of the cover cabinet 2 is disposed in the cover cabinet 2. Any one or both of the cabinets are provided with closing means for closing the sound emitting holes 29 in a closed state of the both cabinets 1, 2.

5 [0008]

With the above-described foldable portable terminal of the present invention, the microphone 13 of the body cabinet 1 and the first speaker 27 of the cover cabinet 2 become opposed to each other through the openings 19 and the sound emitting holes 29 by closing the both cabinets 1, 2. At this time, both of the microphone 13 and the second speaker 210 face the opposite side of the rear surface of the body cabinet 1. The microphone 13 and the second speaker 210 caused to function in this state allow a user to perform speech transmission and reception with the microphone 13 and the second speaker 210 facing himself.

[0009]

At this time, a sound wave emitted from the second speaker 210 can be transmitted to the first speaker 41 through the cover cabinet 2 and air inside the cover cabinet 2 to thereby vibrate the first speaker 27. This can cause the first speaker 27 to emit a sound wave having a waveform approximated to that of the sound wave. However, the sound wave is only slightly emitted outside the cover cabinet 2

because the sound emitting holes 29 for emitting the sound wave outside the cover cabinet 2 are closed by the closing means. Further, the sound wave emitted outside the cover cabinet 2 will not be transmitted to the microphone 13

5 because the sound wave attenuates in the process of passing through the openings 19 to reach inside the body cabinet 1.

[0010]

When the both cabinets 1, 2 are opened, the closed state of the sound emitting holes 29 with the closing means  
10 is released to open the sound emitting holes 29. The microphone 13 and the first speaker 27 caused to function in this state allow the user to perform speech transmission and reception with his mouth close to the openings 19 and his ear close to the sound emitting holes 29.

15 [0011]

Specifically, the closing means comprises detection means for detecting an open state and a closed state of the both cabinets 1, 2 and a shutter mechanism 4 for opening/closing the sound emitting holes 29 in accordance  
20 with the detection. The shutter mechanism 4 comprises a shutter member 40 supported so as to be capable of entering between opposed faces of the sound emitting surface of the first speaker 27 and the sound emitting holes 29, and a drive mechanism 42 for reciprocatingly driving the shutter member

40 in accordance with the detection. With operation of the drive mechanism 42, the shutter member 40 enters between the opposed faces to close the sound emitting holes 29 in the closed state of the both cabinets 1, 2, and escapes from  
5 between the opposed faces to open the sound emitting holes 29 in the open state of the both cabinets 1, 2.

[0012]

In the specific construction, when the both cabinets 1, 2 are closed, the detection means detects the closed state of  
10 the both cabinets 1, 2 to bring the drive mechanism 42 into operation in accordance with the detection. With the operation, the shutter member 40 enters between the opposed faces of the sound emitting surface of the first speaker 27 and the sound emitting holes 29 to close the sound emitting  
15 holes 29. Consequently, the sound wave emitted from the first speaker 27 with vibration of the second speaker 210 is only slightly emitted outside the cover cabinet 2, so that the sound wave will not be transmitted to the microphone 13 through the openings 19 of the body cabinet 1.

20 [0013]

When the both cabinets 1, 2 are opened, the detection means detects the opened state of the both cabinets 1, 2 to bring the drive mechanism 42 into operation in accordance with the detection. With the operation, the shutter member

40 escapes from between the opposed faces. Consequently, the sound emitting holes 29 are opened. The first speaker 27 caused to function in this state leads the sound wave emitted from the first speaker 27 to be emitted outside the cover cabinet 2 through the sound emitting holes 29. Therefore, the user can hear the other party's voice emitted from the first speaker 27 with his ear close to the sound emitting holes 29.

[0014]

10 In another specific construction, the openings 19 and the sound emitting holes 29 are provided in positions to be slightly staggered in a closed state of the both cabinets 1, 2, and the closing means comprises a projection 43 formed within an inner surface area of the body cabinet 1 in a position to face the sound emitting holes 29 with the both cabinets 1, 2 closed. The projection 43 closes the sound emitting holes 29 in the closed state of the both cabinets 1, 2, and separates from the sound emitting holes 29 with the cover cabinet 2 opened.

20 [0015]

In the specific construction, closing the both cabinets 1, 2 brings the projection 43 on the inner surface of the body cabinet 1 into contact with the inner surface of the cover cabinet 2 to close the sound emitting holes 29 with the

projection 43.

Opening the both cabinets 1, 2 separates the projection 43 from the sound emitting holes 29 to thereby open the sound emitting holes 29. Consequently, the sound wave emitted from the first speaker 27 is emitted outside the cover cabinet 2 through the sound emitting holes 29.

[0016]

Further specifically, the projection 43 is formed from an elastic resin.

In the specific construction, when the both cabinets 1, 2 are closed, the sound wave emitted from the first speaker 27 is effectively absorbed due to elasticity of the projection 43 closing the sound emitting holes 29.

[EFFECT OF THE INVENTION]

[0017]

The foldable portable terminal of the present invention prevents howling due to a sound wave emitted from a speaker disposed in one cabinet being transmitted to a microphone disposed in the other cabinet when the both cabinets are closed.

[BEST MODE FOR CARRYING OUT THE INVENTION]

[0018]

Foldable portable telephones embodying the present invention will be specifically described below with reference

to the drawings.

### First Embodiment

As shown in FIG. 1 and FIG. 2, a foldable portable telephone of the present embodiment includes a body cabinet 1 coupled to a cover cabinet 2 through a hinge mechanism 3. The body cabinet 1 and the cover cabinet 2 are foldable with an inner surface of the body cabinet 1 and an inner surface of the cover cabinet 2 opposed to each other. The cover cabinet 2 includes an inner cabinet half 25 joined to a rear cabinet half 26. The body cabinet 1 also has a construction similar to that of the cover cabinet 2.

[0019]

As shown in FIG. 1, a plurality of manual keys 11 are disposed on the inner surface of the body cabinet 1. A transmitter 12 is recessed below the manual keys 11. The transmitter 12 is formed with an opening 19 penetrating inwardly from the inner surface side of the body cabinet 1. A microphone 13 having a sound collecting surface facing the opening 19 is disposed inside the body cabinet 1. A cabinet open/close detection switch 15 is also disposed at an end by the hinge mechanism 3. A side key 14 is disposed on a side surface of the body cabinet 1.

[0020]

A main display 20 is disposed on the inner surface of

the cover cabinet 2. A receiver 21 is disposed above the main display 20 in a position to be opposed to the transmitter 12 with the both cabinets 1, 2 closed. A first speaker 27 having a sound emitting surface facing the receiver 21 is disposed inside the cover cabinet 2. The receiver 21 is provided with a plurality of sound emitting holes 29 for passing a sound wave from the first speaker 27. Below the main display 20 projects a press pin 24 for pressing the cabinet open/close detection switch 15 by closing the both cabinets 1, 2.

[0021]

As shown in FIG. 2, the cover cabinet 2 has a rear surface provided with a sub display 22, and a sound emitter 23 disposed between the sub display 22 and the hinge mechanism 3. A second speaker 210 having a sound emitting surface facing the sound emitter 23 is disposed inside the cover cabinet 2.

[0022]

As shown in FIG. 3, the first speaker 27 disposed inside the cover cabinet 2 is held and fixed by a pair of speaker holding members 28, 28. Disposed by one speaker holding member 28 is a shutter mechanism 4 for opening/closing the plurality of sound emitting holes 29 in response to opening/closing of the both cabinets 1, 2.



[0023]

The shutter mechanism 4 includes a band-like shutter member 40 supported slidably along a reverse surface of the inner cabinet half 25, a shutter containing room 41 for  
5 containing the shutter member 40, and a drive mechanism 42 for reciprocatingly driving the shutter member 40 in response to opening/closing of the both cabinets 1, 2. The shutter member 40 is slidable along the reverse surface of the inner cabinet half 25 with operation of the drive mechanism 42  
10 between a contained position of being contained in the shutter containing room 41 as shown in FIG. 3 and a closing position of closing the plurality of sound emitting holes 29 by entering between opposed faces of the sound emitting surface of the first speaker 27 and the plurality of sound  
15 emitting holes 29 as shown in FIG. 4.

[0024]

When the above-described foldable portable telephone of the present embodiment is carried in a pocket or a bag, the both cabinets 1, 2 are folded from an opened state of the  
20 both cabinets 1, 2 as shown in FIG. 1 to close the both cabinets 1, 2 as shown in FIG. 2. This hides the main display 20 and the plurality of manual keys 11 shown in FIG. 1 inside the both cabinets 1, 2. Under these circumstances, there is no possibility that the main display 20 may be

damaged by an action of an external force, nor is the possibility that the plurality of manual keys 11 may be pressed by an action of an external force to cause misoperation.

5 [0025]

At this time, as shown in FIG. 4, the cabinet open/close detection switch 15 is pressed by the press pin 24 to turn to an on state, feeding a signal for notifying the on state to a control circuit (not shown) incorporated in the body cabinet 1. The control circuit detects that the both  
10 cabinets 1, 2 are closed based on the signal, and feeds the detection signal to the drive mechanism 42 of the shutter mechanism 4. In response to the detection signal, the drive mechanism 42 slides the shutter member 40 from the contained  
15 position shown in FIG. 3 to the closing position shown in FIG. 4. The plurality of sound emitting holes 29 are thereby closed with the shutter member 40, which intercepts a path for emitting a sound wave emitted from the first speaker 27 outside the cover cabinet 2.

20 [0026]

Depressing the side key 14 in this state to set a hands-free mode allows a user to perform speech transmission and reception with the foldable portable telephone placed on a desk without held by the user's hand.

At this time, the control circuit causes the microphone 13 and the second speaker 210 to function in response to the signal from the cabinet open/close detection switch 15 and the hands-free mode being set. Because the transmitter 12 is  
5 recessed on the inner surface of the body cabinet 1, the opening 19 of the transmitter 12 is not closed by the inner surface of the cover cabinet 2 even when the both cabinets 1, 2 are closed.

When the both cabinets 1, 2 are placed on a desk in  
10 this state with a rear surface of the body cabinet 1 in contact with a surface of the desk, the sound emitter 23 and the transmitter 12 thereby become opposed to the user. Speech transmission and reception are performed by the other party's voice being emitted from the sound emitter 23, and  
15 the user's voice being collected by the transmitter 12.

[0027]

At this time, vibration of the second speaker 210 can be transmitted to the first speaker 27 through the cover cabinet 2 and air inside the cover cabinet 2 to thereby  
20 vibrate the first speaker 27. This can cause the first speaker 27 to emit a sound wave having a waveform approximated to that of the sound wave emitted from the second speaker 210. However, the sound wave emitted from the first speaker 27 is only slightly emitted outside the cover

cabinet 2 because the plurality of sound emitting holes 29 are closed by the shutter member 40. Further, the sound wave emitted outside the cover cabinet 2 will not be transmitted to the microphone 13 because the sound wave attenuates in the process of passing through the opening 19 of the transmitter 12 to reach inside the body cabinet 1.

Therefore, howling through the first speaker 27 will not occur between the second speaker 210 and the microphone 13, so that there is no possibility of giving the other party displeasure.

[0028]

With the above-described foldable portable telephone of the present embodiment, speech transmission and reception, message transmission and reception and creation of a transmitting message can be performed with the both cabinets 1, 2 opened as shown in FIG. 1.

Opening the both cabinets 1, 2 exposes the main display 20 and the receiver 21 on the inner surface of the cover cabinet 2, and at the same time exposes the manual keys 11 and the transmitter 12 on the inner surface of the body cabinet 1. At this time, the cabinet open/close detection switch 15 is released from the press by the press pin 24 to turn to an off state. Accordingly, the control circuit causes the microphone 13 and the first speaker 27 to

function.

[0029]

The control circuit also brings the drive mechanism 42 of the shutter mechanism 4 into operation to thereby slide  
5 the shutter member 40 from the closing position shown in FIG. 4 to the contained position shown in FIG. 3. Consequently, the plurality of sound emitting holes 29 are opened, so that the sound wave emitted from the first speaker 27 is emitted outside the cover cabinet 2 through the plurality of sound  
10 emitting holes 29.

[0030]

Therefore, when a call arrives, the user can perform an off-hook operation with a manual key 11 to thereby allow the call, and answer the incoming call with the receiver 21 close  
15 to his ear and the transmitter 12 close to his mouth.

[0031]

When a message is received, contents of the received message are displayed on a screen of the main display 20 by manipulation of a manual key 11, so that the contents can be  
20 checked. When a message is created, texts created by the user are displayed on the screen of the main display 20 by manipulation of a manual key 11.

[0032]

According to the above-described foldable portable

telephone of the present embodiment, the plurality of sound emitting holes 29 of the receiver 21 open/close in response to opening/closing of the both cabinets 1, 2. Even when the second speaker 210 and the microphone 13 are caused to

5 function simultaneously with the both cabinets 1, 2 closed, a howling phenomenon will not occur between the second speaker 210 and the microphone 13, so that hands-free speech transmission and reception are performed in good call condition.

10 [0033]

#### Second Embodiment

A foldable portable telephone of the present embodiment shown in FIG. 5 and FIG. 6 differs from that of the above-described first embodiment in a structure of closing the  
15 sound emitting holes 29, but is the same as that of the first embodiment in other structures, and therefore will be described as to the structure of closing the sound emitting holes 29, and not described as to the other structures with the same reference characters.

20 [0034]

As shown in FIG. 5, the foldable portable telephone of the present embodiment has the receiver 21 of the cover cabinet 2 disposed closer to the main display 20 than in the above-described first embodiment, so that, as shown in FIG.

6, the receiver 21 and the transmitter 12 of the body cabinet 1 are staggered in a coupling direction of the both cabinets 1, 2 when the both cabinets 1, 2 are closed.

[0035]

5           A flat plate-like projection 43 made of an elastic resin is disposed on the inner surface of the body cabinet 1 in a position to be opposed to the receiver 21 of the cover cabinet 2 with the both cabinets 1, 2 closed.

[0036]

10           With the above-described foldable portable telephone of the present embodiment, the projection 43 on the inner surface of the body cabinet 1 is brought into contact with the inner surface of the cover cabinet 2 by closing the both cabinets 1, 2 to close the sound emitting holes 29 with the  
15 projection 43, which intercepts a path for emitting a sound wave emitted from the first speaker 27 outside the cover cabinet 2.

[0037]

20           If the hands-free mode is set in this state, the control circuit causes the microphone 13 and the second speaker 210 to function in response to a signal for notifying an on state of the cabinet open/close detection switch 15 and the hands-free mode being set. The other party's voice is thereby emitted from the second speaker 210 of the sound

emitter 23 on the rear surface of the cover cabinet 2, while the user's voice is collected by the microphone 13 of the transmitter 12.

[0038]

5           At this time, the first speaker 27 also can vibrate with vibration of the second speaker 210 to thereby emit a sound wave from the first speaker 27. However, the sound wave from the first speaker 27 is effectively absorbed due to elasticity of the projection 43 made of an elastic resin, and  
10   hardly emitted outside the cover cabinet 2 because the plurality of sound emitting holes 29 for passing the sound wave are closed by the projection 43. Consequently, only an extremely slight sound wave is emitted outside the cover cabinet 2, so that the sound wave will not be transmitted to  
15   the microphone 13 through the opening 19 of the body cabinet 1.

[0039]

          The projection 43 of the body cabinet 1 is separated from the sound emitting holes of the cover cabinet 2 by  
20   opening the both cabinets 1, 2 to thereby open the sound emitting holes 29. At this time, the cabinet open/close detection switch 15 is released from the press by the press pin 24 to turn to an off state. Accordingly, the control circuit causes the microphone 13 and the first speaker 27 to



function.

Therefore, when a call arrives, the user can perform an off-hook operation with a manual key 11 to thereby allow the call, and answer the incoming call with the receiver 21 close  
5 to his ear and the transmitter 12 close to his mouth.

[0040]

According to the above-described foldable portable telephone of the present embodiment, the plurality of sound emitting holes 29 of the receiver 21 can be opened/closed in  
10 response to opening/closing of the both cabinets 1, 2 with a simple construction of providing the projection made of an elastic resin on the inner surface of the body cabinet 1. This will prevent howling through the first speaker 27 from occurring between the second speaker 210 and the microphone  
15 13 even when the second speaker 210 and the microphone 13 are caused to function with the both cabinets 1, 2 closed.

[BRIEF DESCRIPTION OF THE DRAWINGS]

[0041]

[FIG. 1] is a perspective view of a foldable  
20 portable telephone in an open state of a first embodiment of the present invention.

[FIG. 2] is a perspective view of the foldable portable telephone in a closed state.

[FIG. 3] is a partially broken front view of the

foldable portable telephone in the open state.

[FIG. 4] is a partially broken front view of the foldable portable telephone in the closed state.

[FIG. 5] is a perspective view of a foldable  
5 portable telephone in an open state of a second embodiment of the present invention.

[FIG. 6] is a sectional view of the foldable portable telephone in a closed state.

[FIG. 7] is a sectional view of a conventional  
10 foldable portable telephone in an open state.

[FIG. 8] is a sectional view of the foldable portable telephone in a closed state.

[EXPLANATION OF REFERENCE NUMERALS]

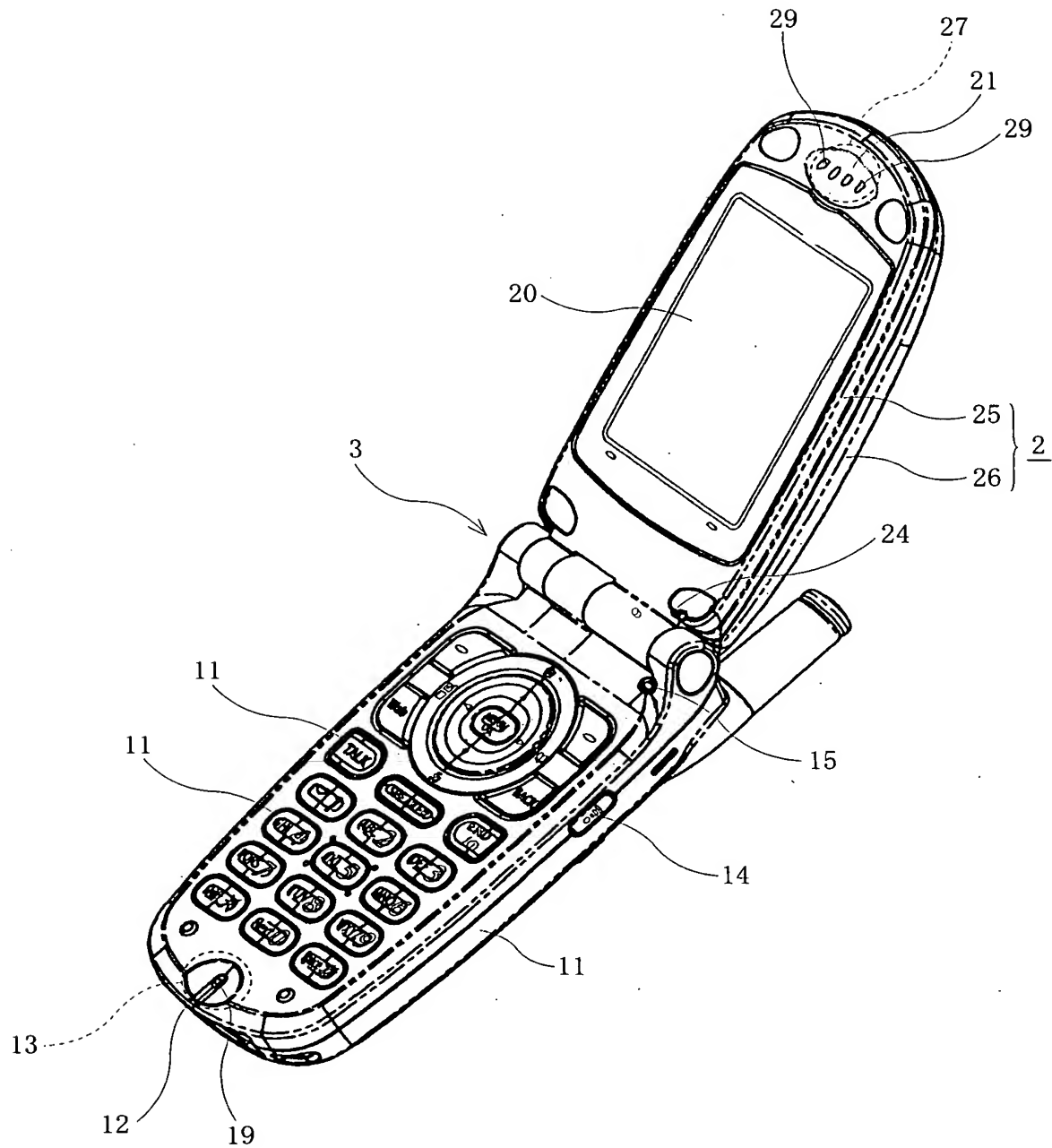
[0042]

- 15 (1) body cabinet
- (11) manual key
- (12) transmitter
- (13) microphone
- (15) cabinet open/close detection switch
- 20 (19) opening
- (2) cover cabinet
- (20) main display
- (21) receiver
- (23) sound emitter

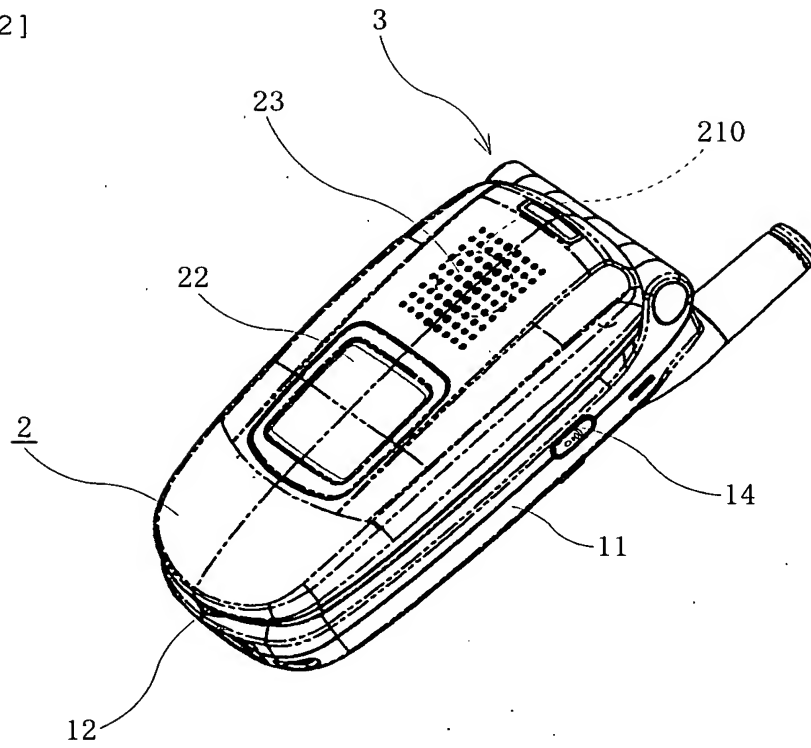
- (24) press pin
- (27) first speaker
- (29) sound emitting hole
- (210) second speaker
- 5 (3) hinge mechanism
- (4) shutter mechanism
- (40) shutter member
- (42) drive mechanism
- (43) projection

[TITLE OF THE DOCUMENT]

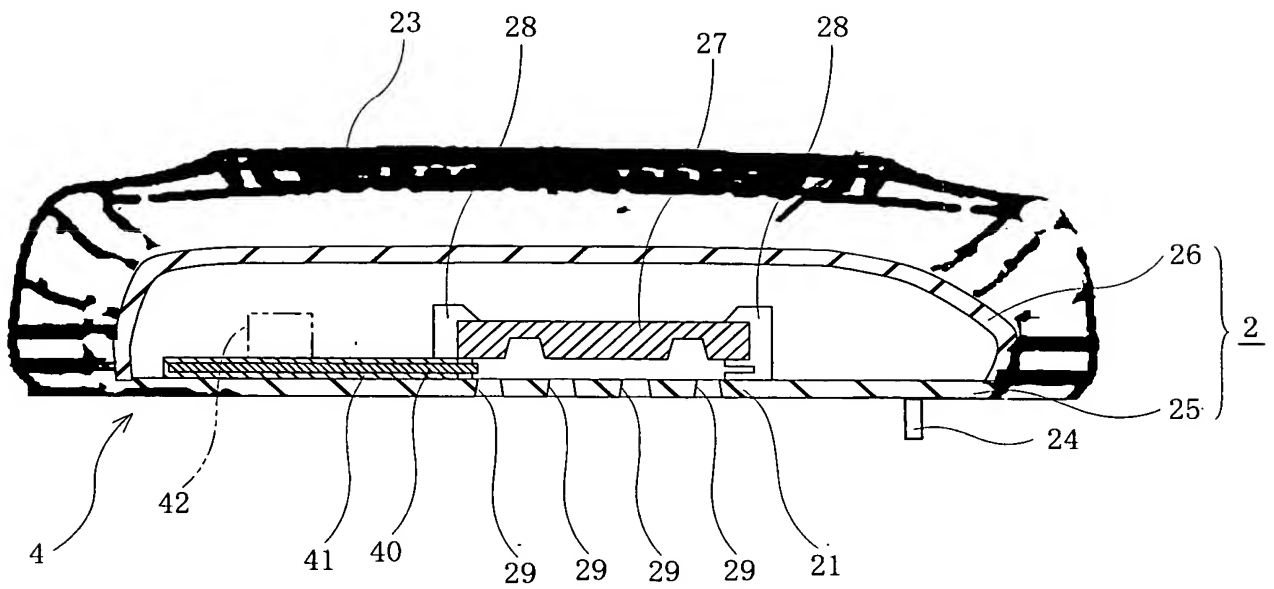
[FIG. 1]



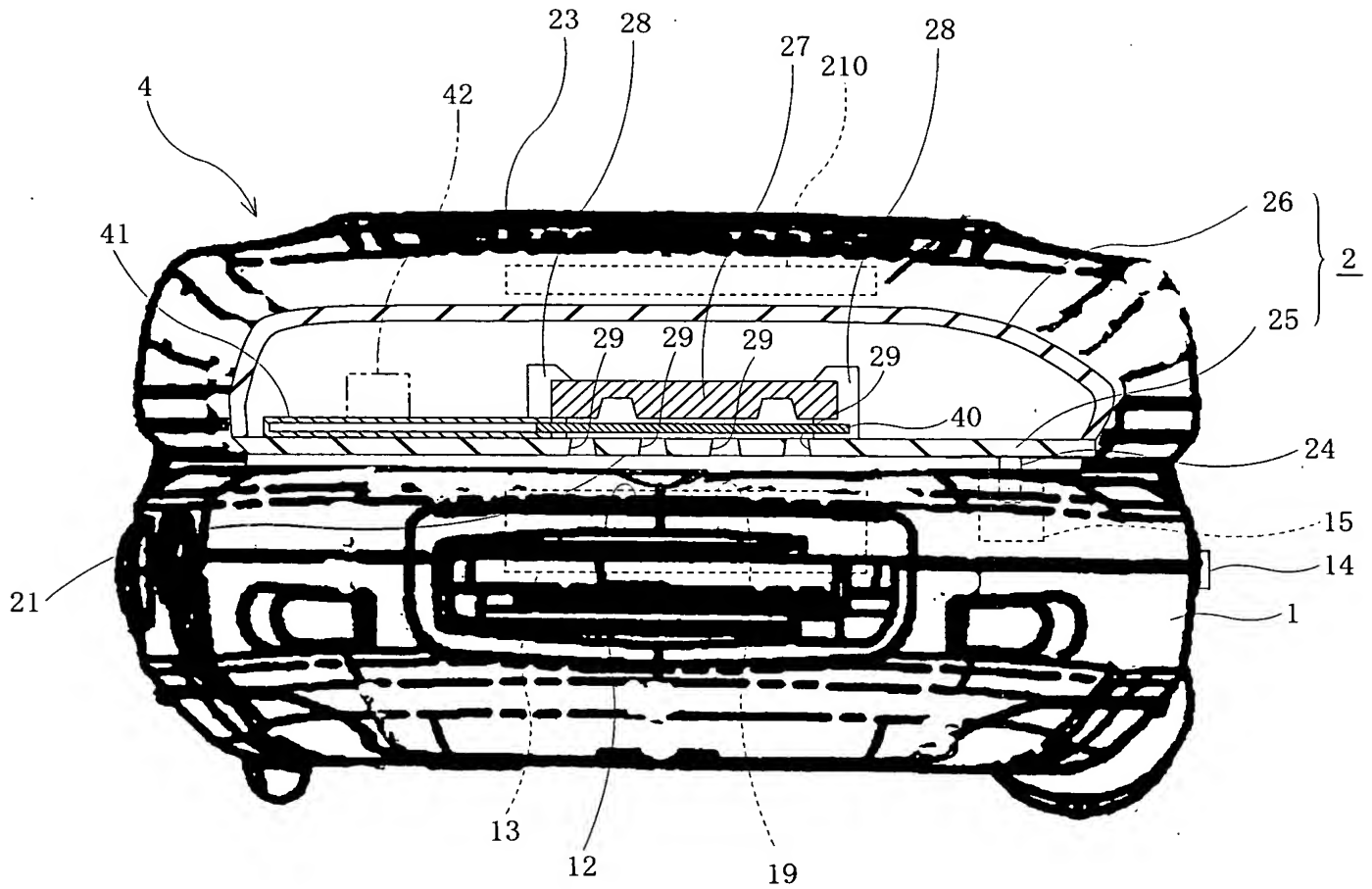
[FIG. 2]



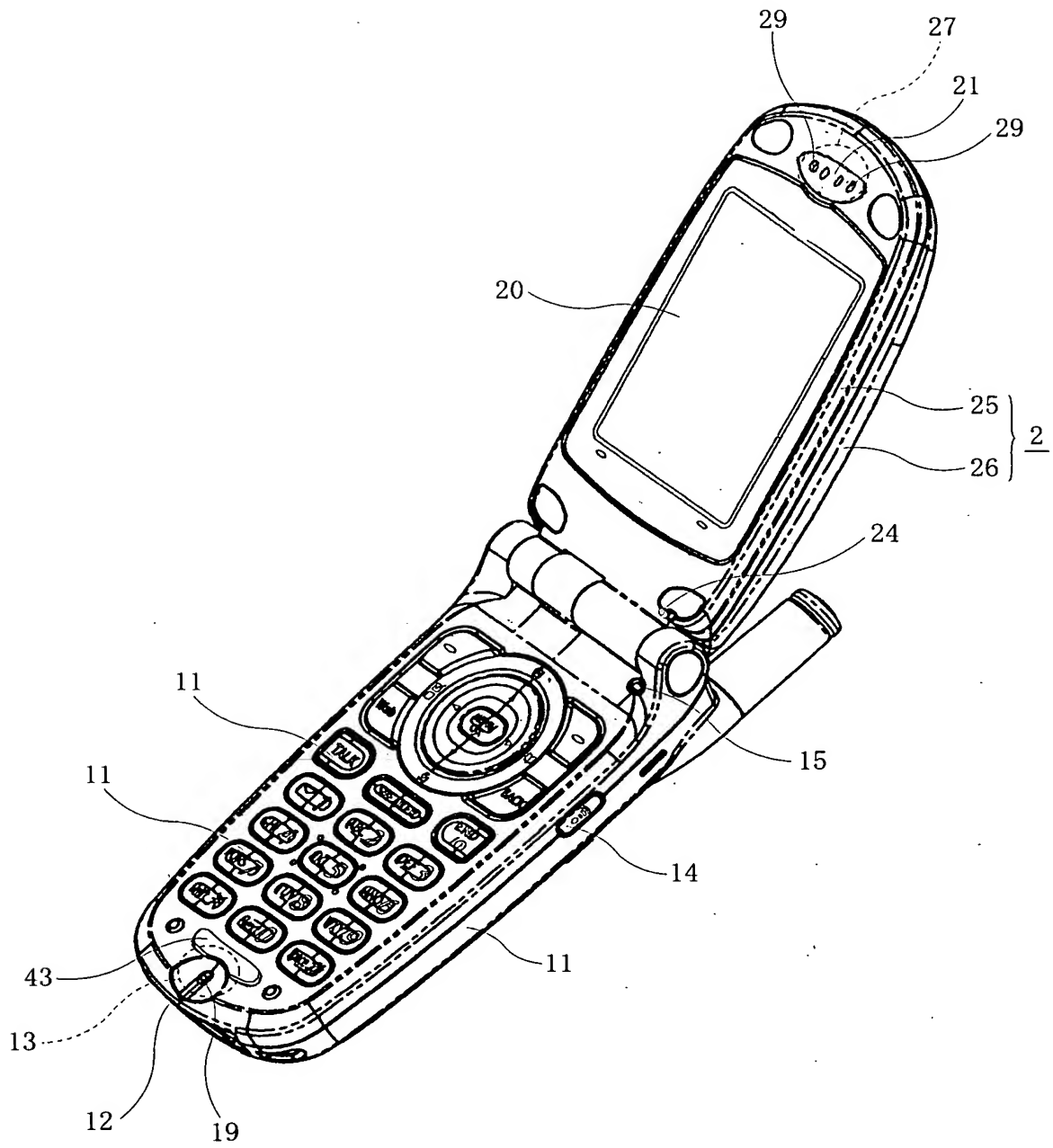
[FIG. 3]



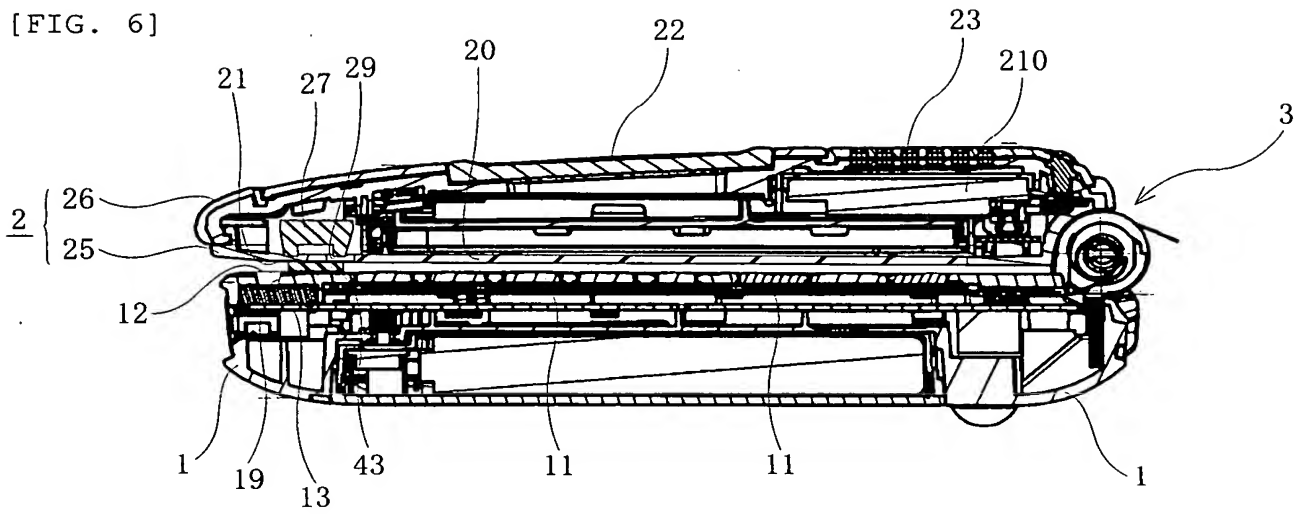
[FIG. 4]



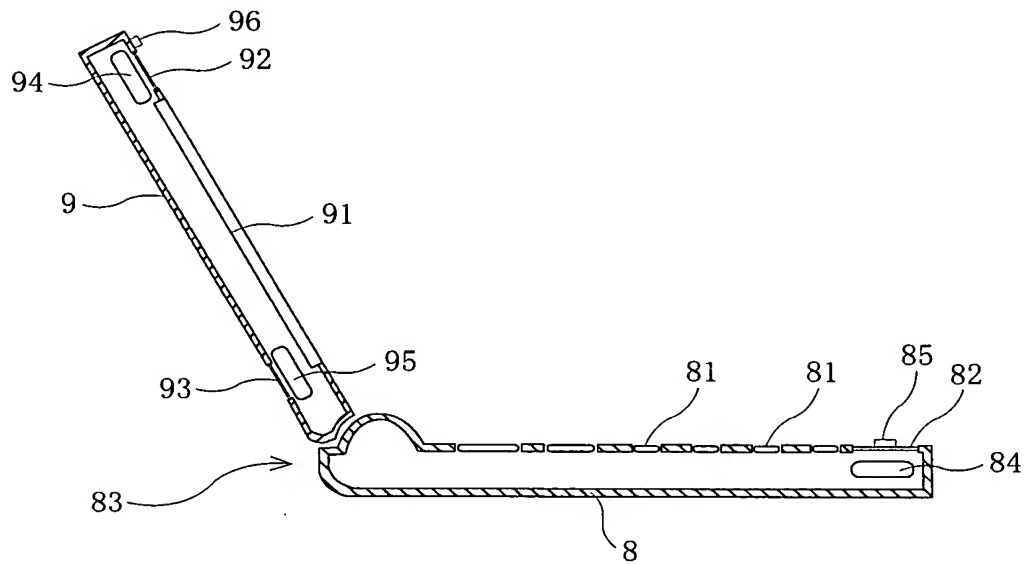
[FIG. 5]



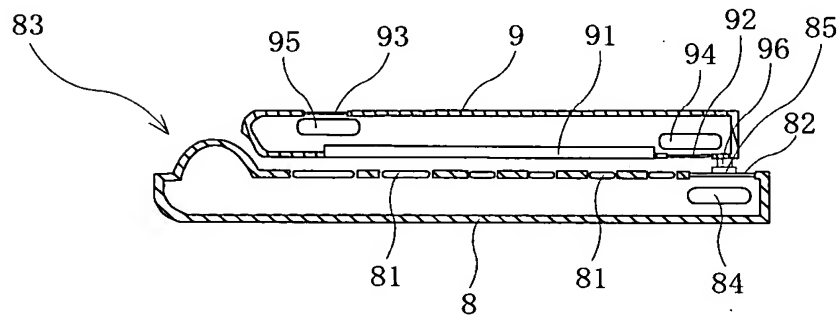
[FIG. 6]



[FIG. 7]



[FIG. 8]





[TITLE OF THE DOCUMENT] ABSTRACT

[ABSTRACT]

[PROBLEM] To provide a foldable portable terminal including a pair of coupled cabinets, wherein a sound wave emitted from a speaker disposed in one cabinet is not transmitted to a microphone disposed in the other cabinet when the both cabinets are closed.

[SOLUTION] A foldable portable terminal of the present invention includes a body cabinet 1 provided with a microphone 13 and a cover cabinet 2 provided with a first speaker 27 and a second speaker 210, openably/closably coupled through a hinge mechanism 3. The cover cabinet 2 includes a plurality of sound emitting holes 29 provided on an inner surface thereof and opposed to a sound emitting surface of the first speaker 27, and incorporates a shutter mechanism 4 for closing the sound emitting holes 29 in a closed state of the both cabinets 1, 2. The shutter mechanism 4 opens the plurality of sound emitting holes 29 in the open state of the both cabinets 1, 2, and closes the plurality of sound emitting holes 29 in the closed state of the both cabinets 1, 2.

[CHOSEN DRAWING] FIG. 4